



*Philadelphia Water Bureau*

# Philadelphia Water Works.

JANUARY, 1897.

628-1

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*F. LE CLÈRE'S BLACK PRINT PROCESS,  
21 N. 13th ST., PHILADELPHIA.*

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# — TABLE SHOWING CAPACITY OF WORKS —

— AND —

## — STORAGE CAPACITY OF BASINS. —

DRAUGHTING ROOM.  
JOHN E. CODMAN,  
Chief Draughtsman.

— DEPARTMENT OF PUBLIC WORKS. —  
— BUREAU OF WATER —  
— JOHN C. TRAUTWINE JR. —  
— CHIEF —

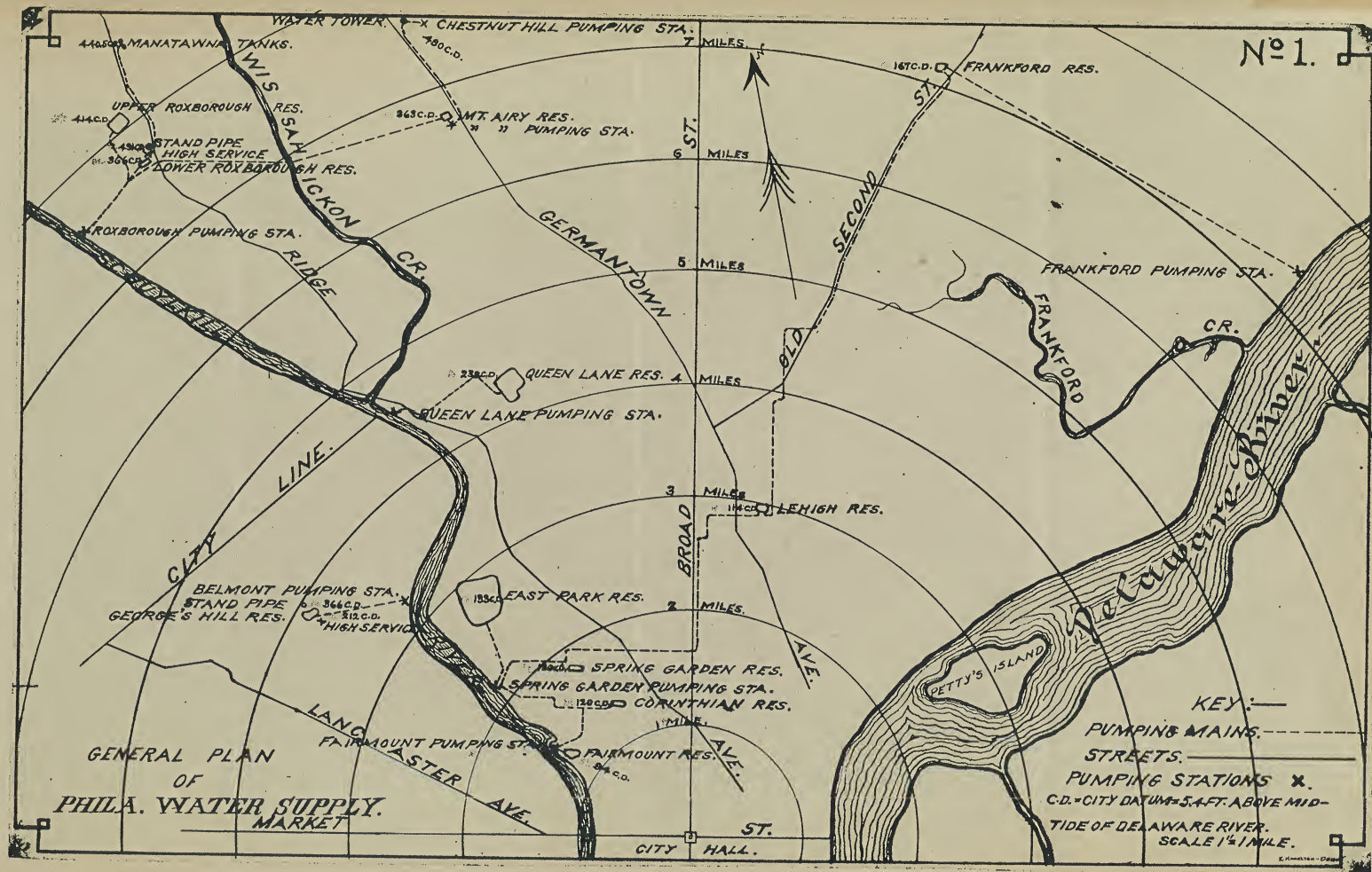
STATIONS.	FAIRMOUNT		SPRING GARDEN			BELMONT	BELMONT AUXILIARY	QUEEN LANE	ROXBOROUGH	ROXBOROUGH AUXILIARY	CHESTNUT HILL	MEADBURY	FRANKFORD	TOTALS.
	WHEELS N° 1, 3, 4	WHEELS N° 5, 7, 9	ENGINES N° 6, 7, 8, 9, 10, 11, 2, 4, 3			ENGINES N° 1, 2, 3, 4	ENGINES N° 1	ENGINES N° 1, 2, 3, 4	ENGINES N° 1, 2, 3	ENGINES N° 1	ENGINES N° 2, 3	ENGINES N° 1, 2, 3	ENGINES N° 1, 2, 3	
CAPACITY OF PUMPS IN MILLIONS OF GALLONS PER DAY.	TOTAL 13	TOTAL 21	TOTAL 168			TOTAL 38	TOTAL 2	TOTAL 80	TOTAL 25	TOTAL 5	TOTAL 3	TOTAL 3	TOTAL 32	* 307 3/4
BASINS SUPPLIED	FAIRMOUNT	SPRING GARDEN	LEHIGH	EAST PARK.	DIRECT PUMPAGE	GEORGE HILL	HIGH SERVICE	QUEEN LANE.	ROXBOROUGH N° 1, 2	HIGH SERVICE.	CHESTNUT HILL AND GERMANTOWN		FRANKFORD	
WATER LEVEL IN BASIN ABOVE CITY DATUM, FEET.	94	120	114	133		212	362 (?)	238	366 4/4 563	487 (?)	TANK 480		167	
BASIN AREA AT WATER SURFACE IN ACRES.	7.2	5.1 2.8	6.3	90.3	40 MILLION GALLONS PER DAY.	6.2		43.5	24 20 5 13				5.8	191.4
CAPACITY OF BASINS IN MILLIONS OF GALLONS.	26	37 12	26	674	40	40		383	13 148 5				36	† 1017
WARDS SUPPLIED.	1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> , 4 <sup>th</sup> , 26 <sup>th</sup> , 30 <sup>th</sup>	5 <sup>th</sup> , 6 <sup>th</sup> , 11 <sup>th</sup> , 12 <sup>th</sup> , 13 <sup>th</sup> , 14 <sup>th</sup> , 18 <sup>th</sup> , 31 <sup>st</sup>	7 <sup>th</sup> , 8 <sup>th</sup> , 9 <sup>th</sup> , 10 <sup>th</sup> , 14 <sup>th</sup> , 16 <sup>th</sup> , 17 <sup>th</sup> , PART OF 20 <sup>th</sup> , 33 <sup>rd</sup>	15 <sup>th</sup> , 29 <sup>th</sup> , PART OF 19 <sup>th</sup> , 20 <sup>th</sup> , 28 <sup>th</sup> , 37 <sup>th</sup>		24 <sup>th</sup> AND 27 <sup>th</sup>			21 <sup>st</sup> , 22 <sup>nd</sup> , PART OF 28 <sup>th</sup> , 37 <sup>th</sup> AND 33 <sup>rd</sup> .				23 <sup>rd</sup> , 25 <sup>th</sup> , 35 <sup>th</sup> , PART OF 33 <sup>rd</sup> .	
POPULATION 1830.	218,446		316,191		192,464	75,471				108,229			136,163	1046,964
AVERAGE DAYS SUPPLY IN BASIN AT 150 GALLONS PER DIEM.	1.4		15.			5.3				10.			2.5	

\* QUEEN LANE NOT INCLUDED.

† INCLUDING NEW ROXBOROUGH BUT NOT QUEEN LANE.

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# — FAIRMOUNT PUMPING STATION<sup>TH</sup> RESERVOIR. —

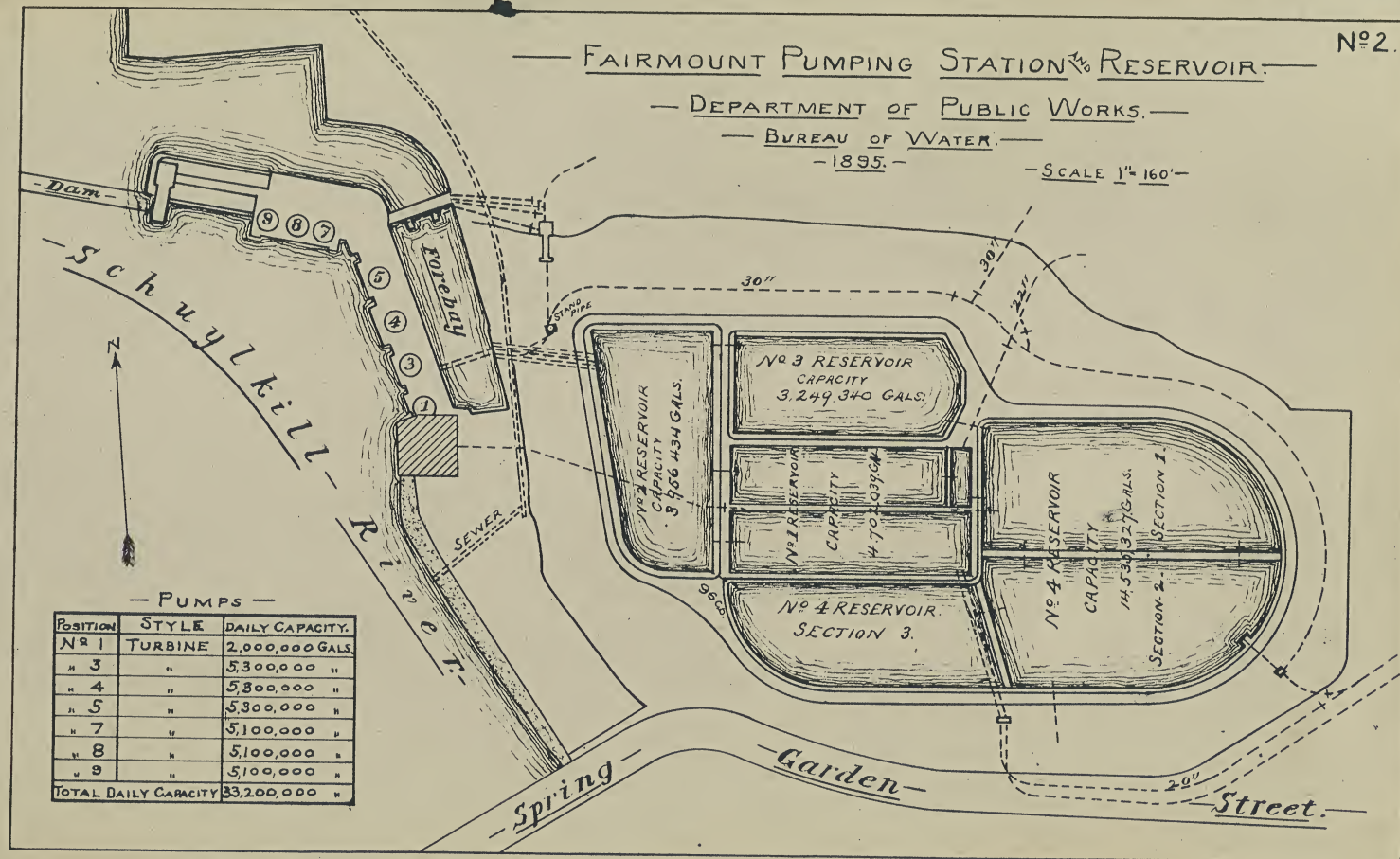
N<sup>o</sup> 2.

— DEPARTMENT OF PUBLIC WORKS. —

— BUREAU OF WATER. —

— 1895. —

— SCALE 1" = 160' —

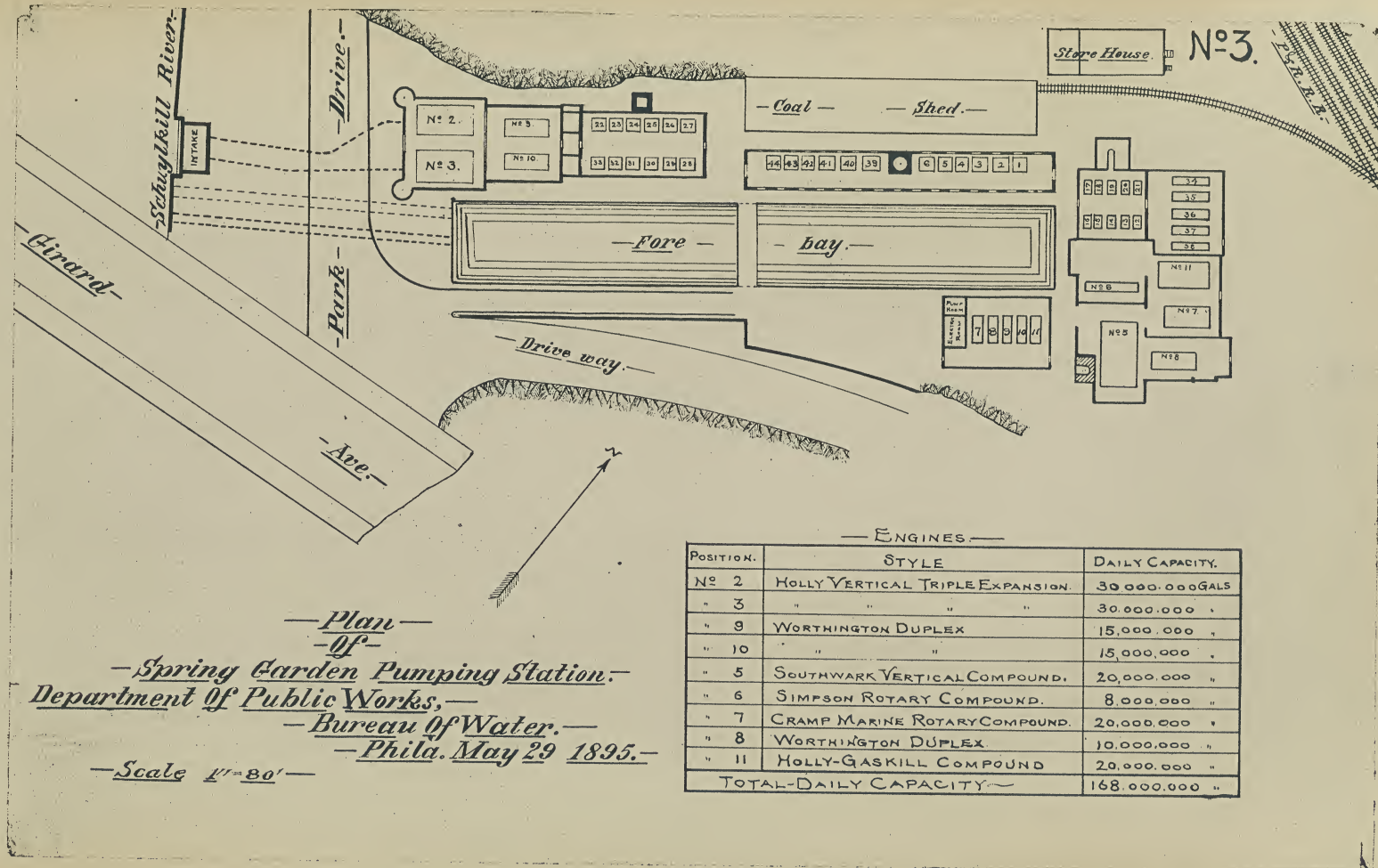


## — PUMPS —

POSITION	STYLE	DAILY CAPACITY.
N <sup>o</sup> 1	TURBINE	2,000,000 GALS.
" 3	"	5,300,000 "
" 4	"	5,300,000 "
" 5	"	5,300,000 "
" 7	"	5,100,000 "
" 8	"	5,100,000 "
" 9	"	5,100,000 "
TOTAL DAILY CAPACITY		33,200,000 "



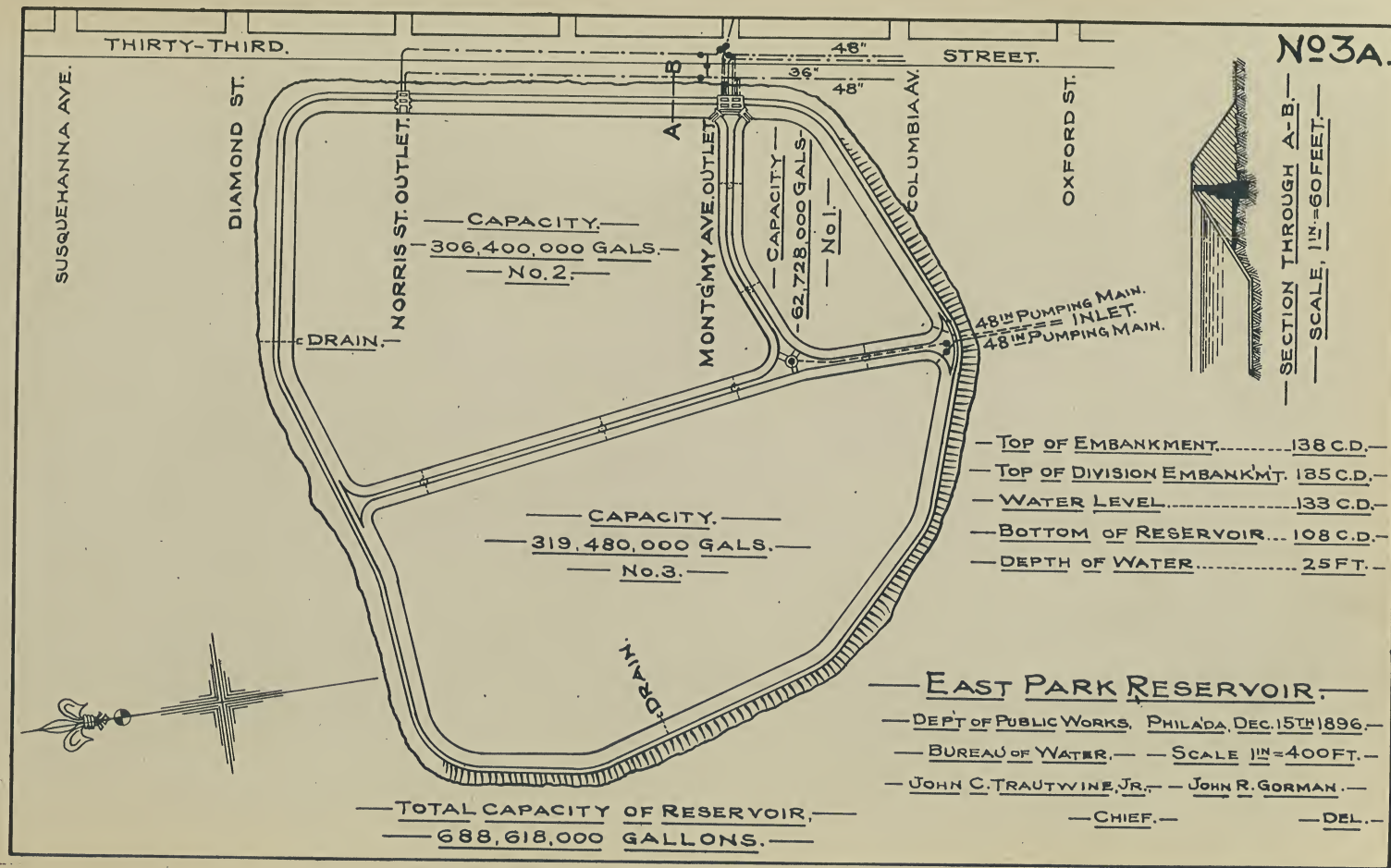
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— ENGINES. —		
POSITION.	STYLE	DAILY CAPACITY.
Nº 2	HOLLY VERTICAL TRIPLE EXPANSION.	30,000,000 GALS.
" 3	" " "	30,000,000 "
" 9	WORTHINGTON DUPLEX	15,000,000 "
" 10	" " "	15,000,000 "
" 5	SOUTHWARK VERTICAL COMPOUND.	20,000,000 "
" 6	SIMPSON ROTARY COMPOUND.	8,000,000 "
" 7	CRAMP MARINE ROTARY COMPOUND.	20,000,000 "
" 8	WORTHINGTON DUPLEX	10,000,000 "
" 11	HOLLY-GASKILL COMPOUND	20,000,000 "
TOTAL-DAILY CAPACITY—		168,000,000 "

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N<sup>o</sup> 4

PLAN

OF

BELMONT PUMPING STATION

DEPT OF PUBLIC WORKS - PHILA. JUNE 8<sup>TH</sup> 1893

BUREAU OF WATER.

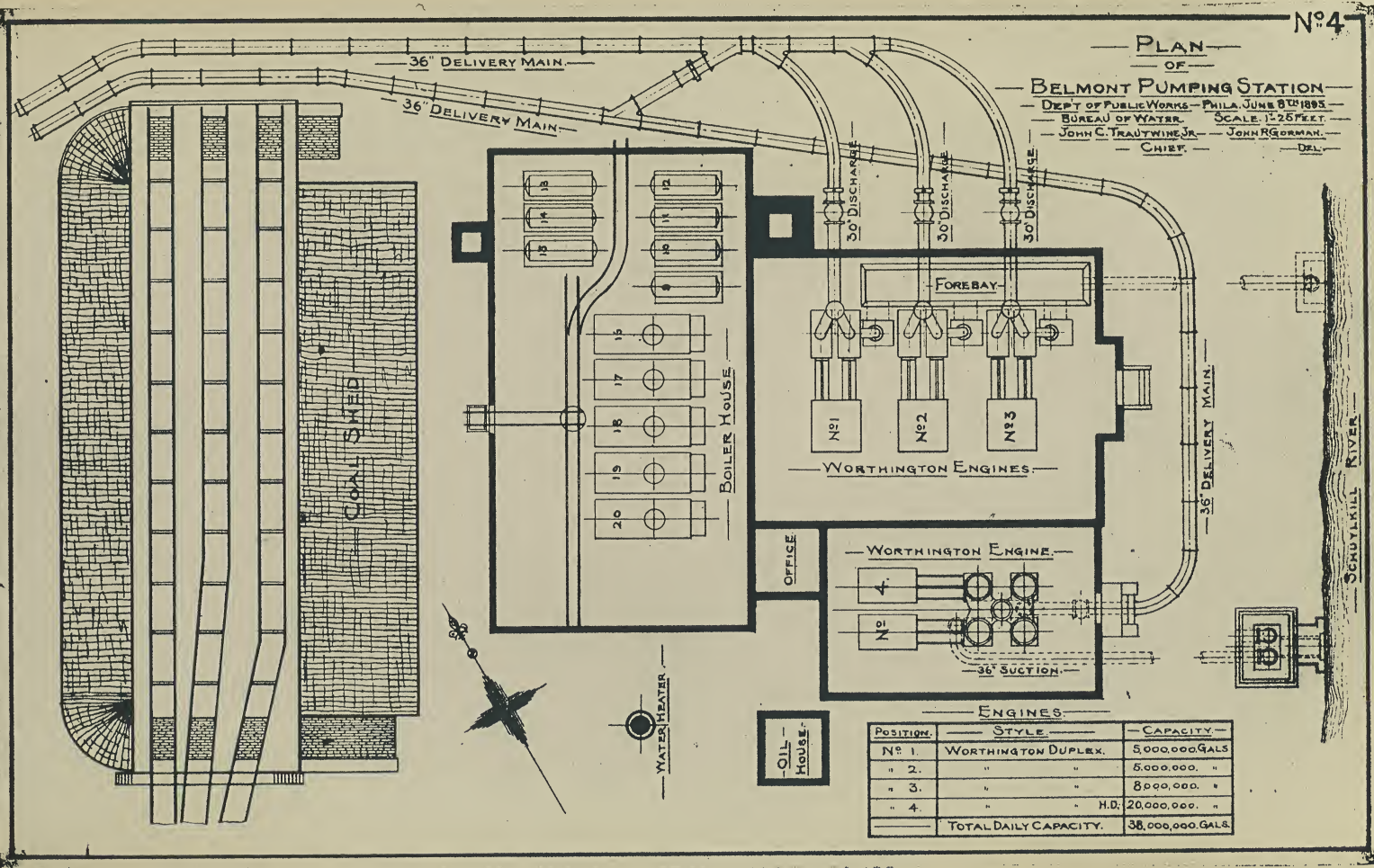
SCALE 1"=25 FEET.

JOHN C. TRAUTWINE JR.

JOHN R. GORMAN.

CHIEF.

DEL.



ENGINES

POSITION.	STYLE	CAPACITY
N <sup>o</sup> 1	WORTHINGTON DUPLEX.	5,000,000 GALS.
" 2.	"	5,000,000. "
" 3.	"	8,000,000. "
" 4.	" H.D.	20,000,000. "
TOTAL DAILY CAPACITY.		38,000,000 GALS.

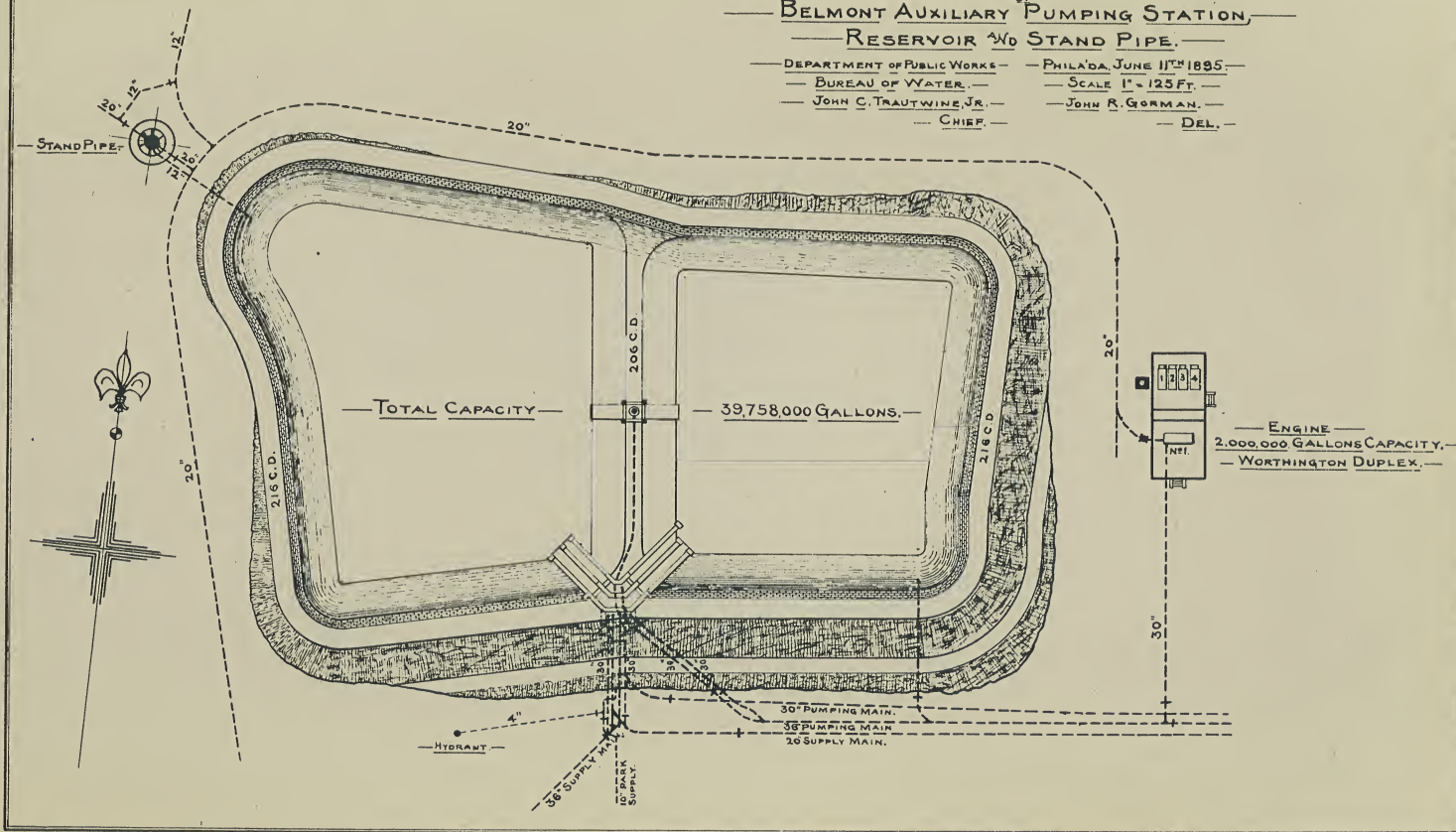


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Nº 5.

— PLAN —  
 — BELMONT AUXILIARY <sup>OF</sup> PUMPING STATION —  
 — RESERVOIR AND STAND PIPE.

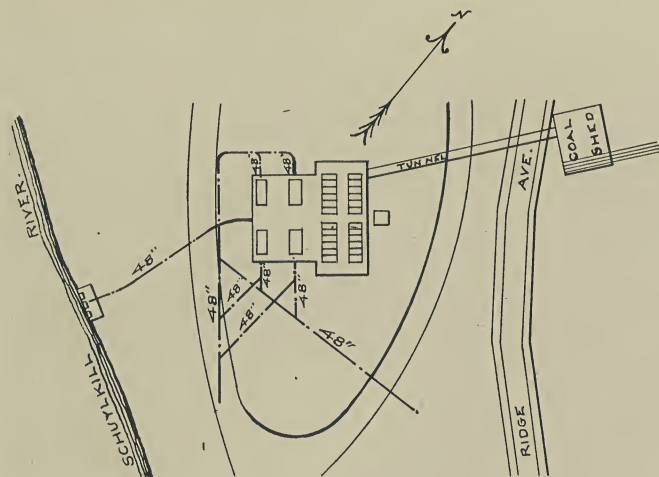
— DEPARTMENT OF PUBLIC WORKS — PHILADELPHIA, JUNE 11<sup>TH</sup> 1895.  
 — BUREAU OF WATER. — SCALE 1" = 125 FT.  
 — JOHN C. TRAUTWINE, JR. — JOHN R. GORMAN.  
 — CHIEF. — DEL.



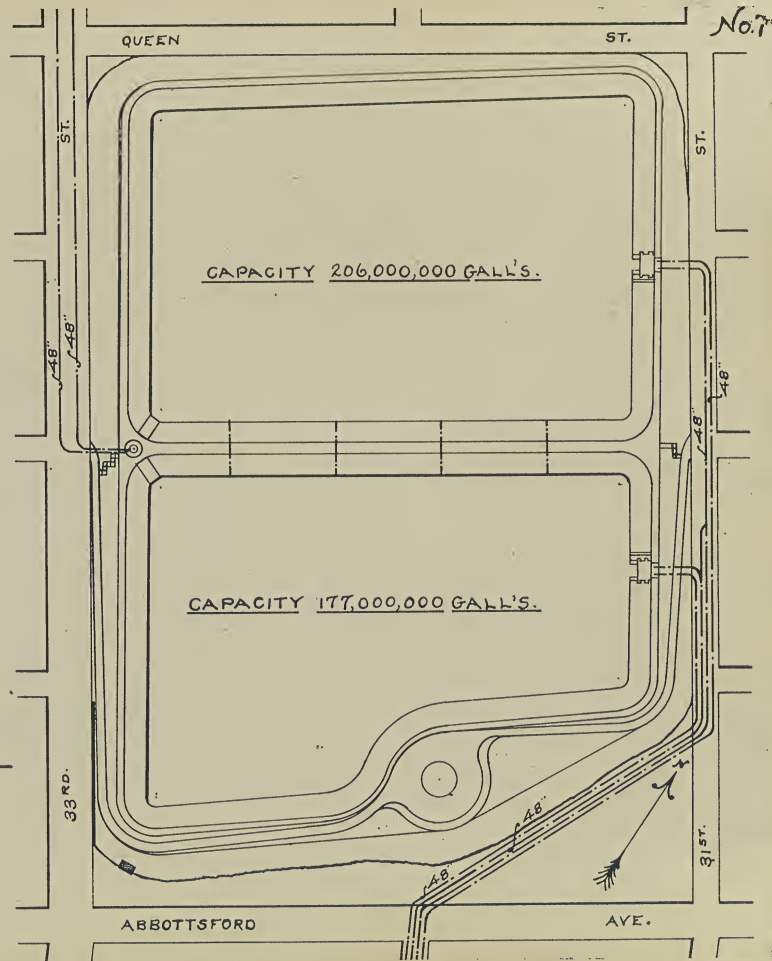
1

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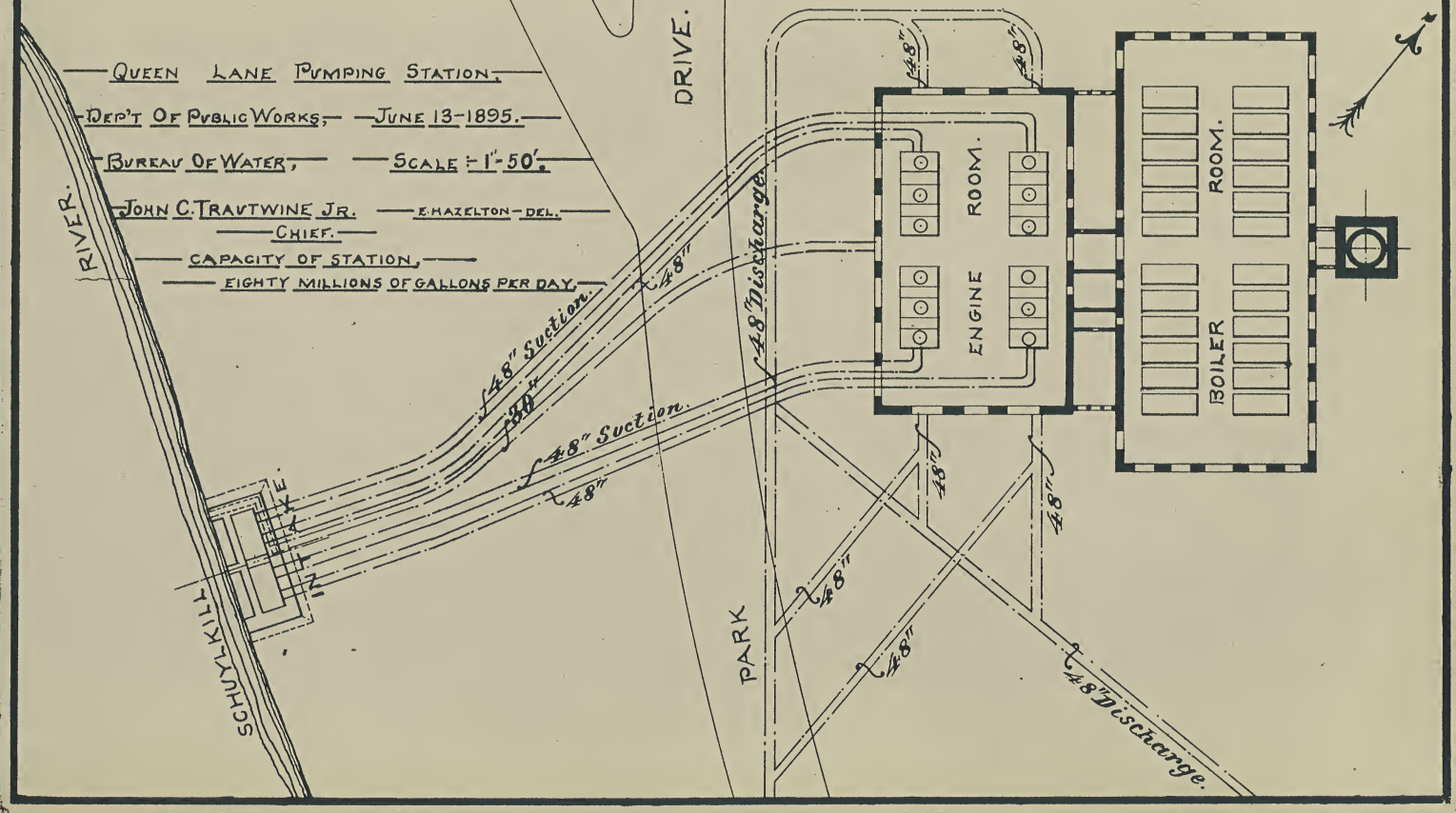
QUEEN LANE PUMPING STATION AND RESERVOIR.  
DEPARTMENT OF PUBLIC WORKS. BUREAU OF WATER.  
JUNE 8 1895. SCALES: 1"=200' AND 1"=300'  
HAZELTON OCL.



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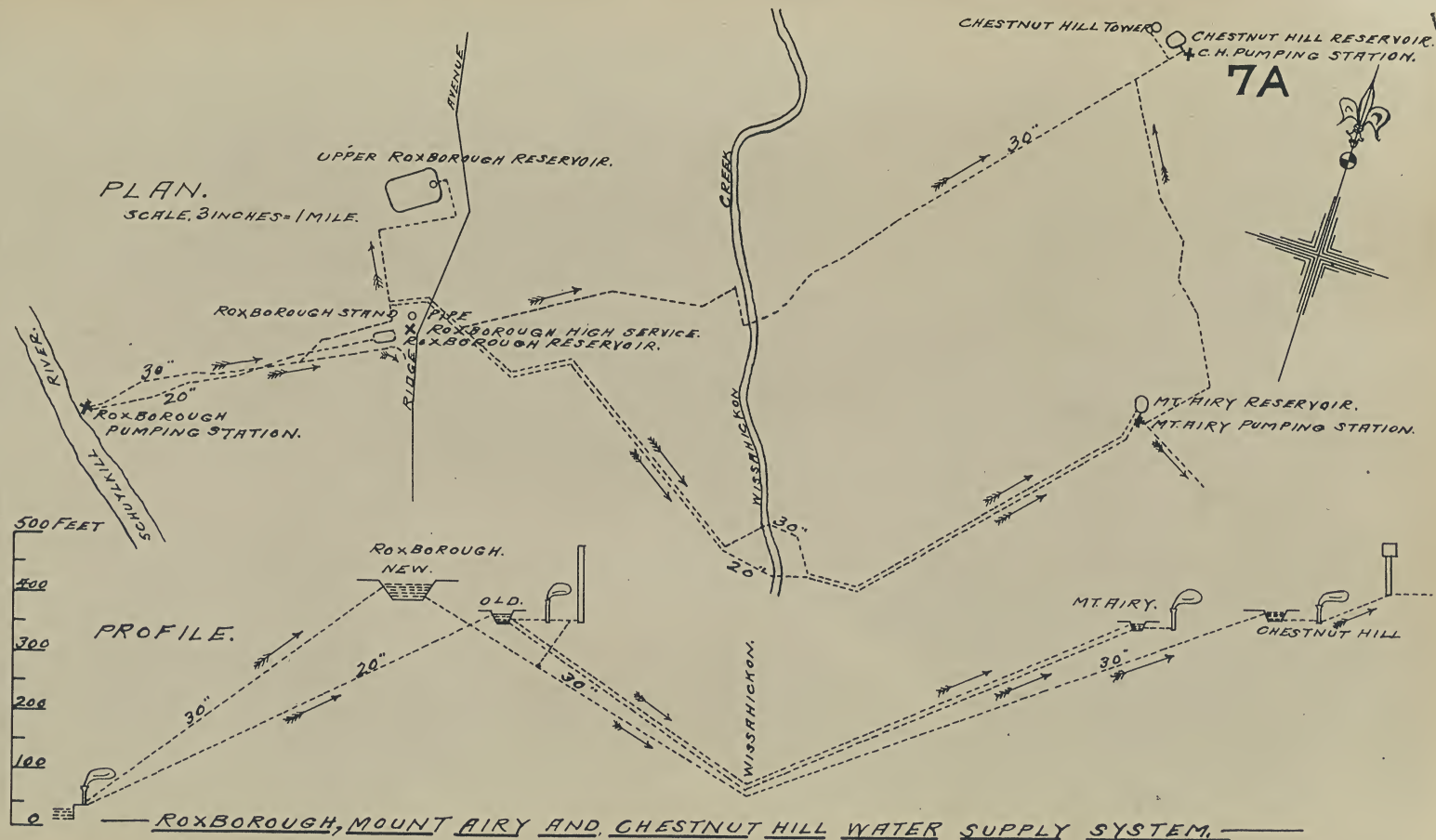
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No. 7½.



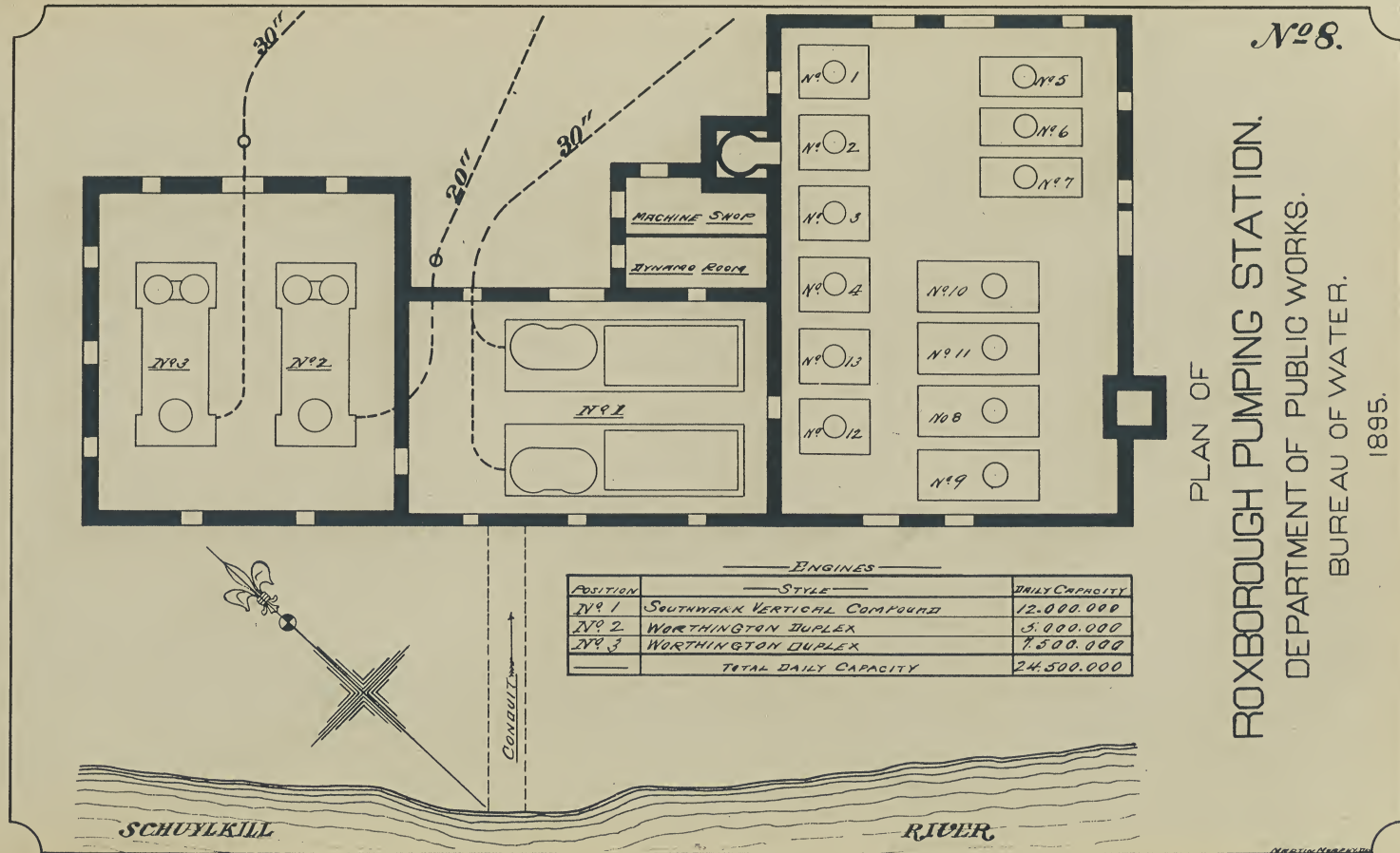


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— ENGINES —		
POSITION	STYLE	DAILY CAPACITY
N° 1	SOUTHWARK VERTICAL COMPOUND	12,000,000
N° 2	WORTHINGTON DUPLEX	5,000,000
N° 3	WORTHINGTON DUPLEX	7,500,000
TOTAL DAILY CAPACITY		24,500,000

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No 9.

# UPPER & LOWER ROXBOROUGH RESERVOIRS,

AND HIGH SERVICE PUMPING STATION.

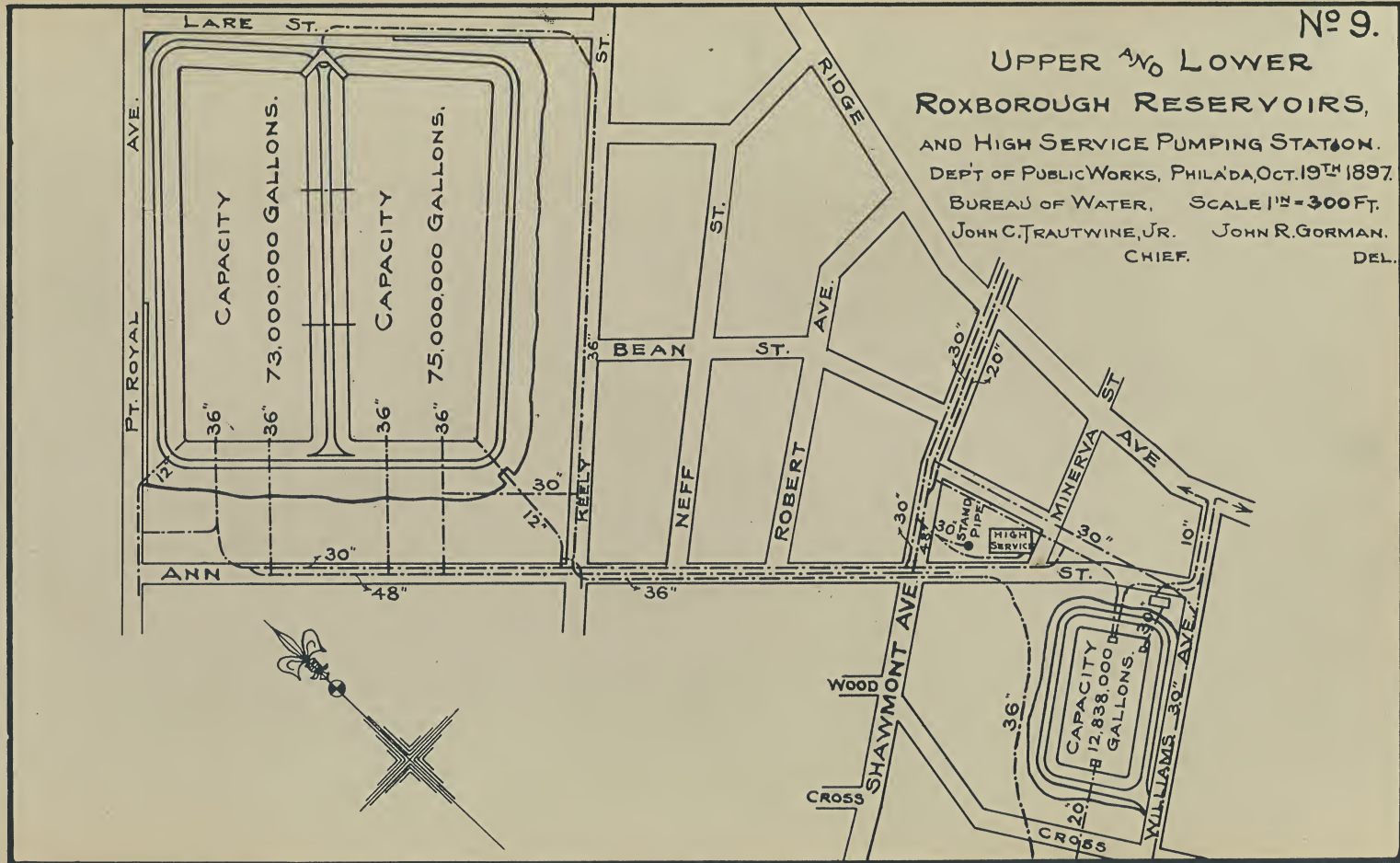
DEPT OF PUBLIC WORKS, PHILA'DA, OCT. 19<sup>TH</sup> 1897.

BUREAU OF WATER, SCALE 1" = 300 FT.

JOHN C. TRAUTWINE, JR. JOHN R. GORMAN.

CHIEF.

DEL.





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UNION

PLAN OF

AVE.

N<sup>o</sup> 10

## CHESTNUT HILL PUMPING STATION &amp; RESERVOIR

DEPARTMENT OF PUBLIC WORKS.

BUREAU OF WATER.

1895.

ST



WATER TOWER

TWENTY-FIFTH

Position	Engines	Style	Daily Capacity
N <sup>o</sup> 2	Knowles Pump		250,000
N <sup>o</sup> 3	Washington Duplex		250,000
	TOTAL DAILY CAPACITY		500,000

8"

CAPACITY  
5,000,000  
GALLONSWELL  
20' DEEP

TWENTY-FOURTH

HARTWELL

AVE.

Slip

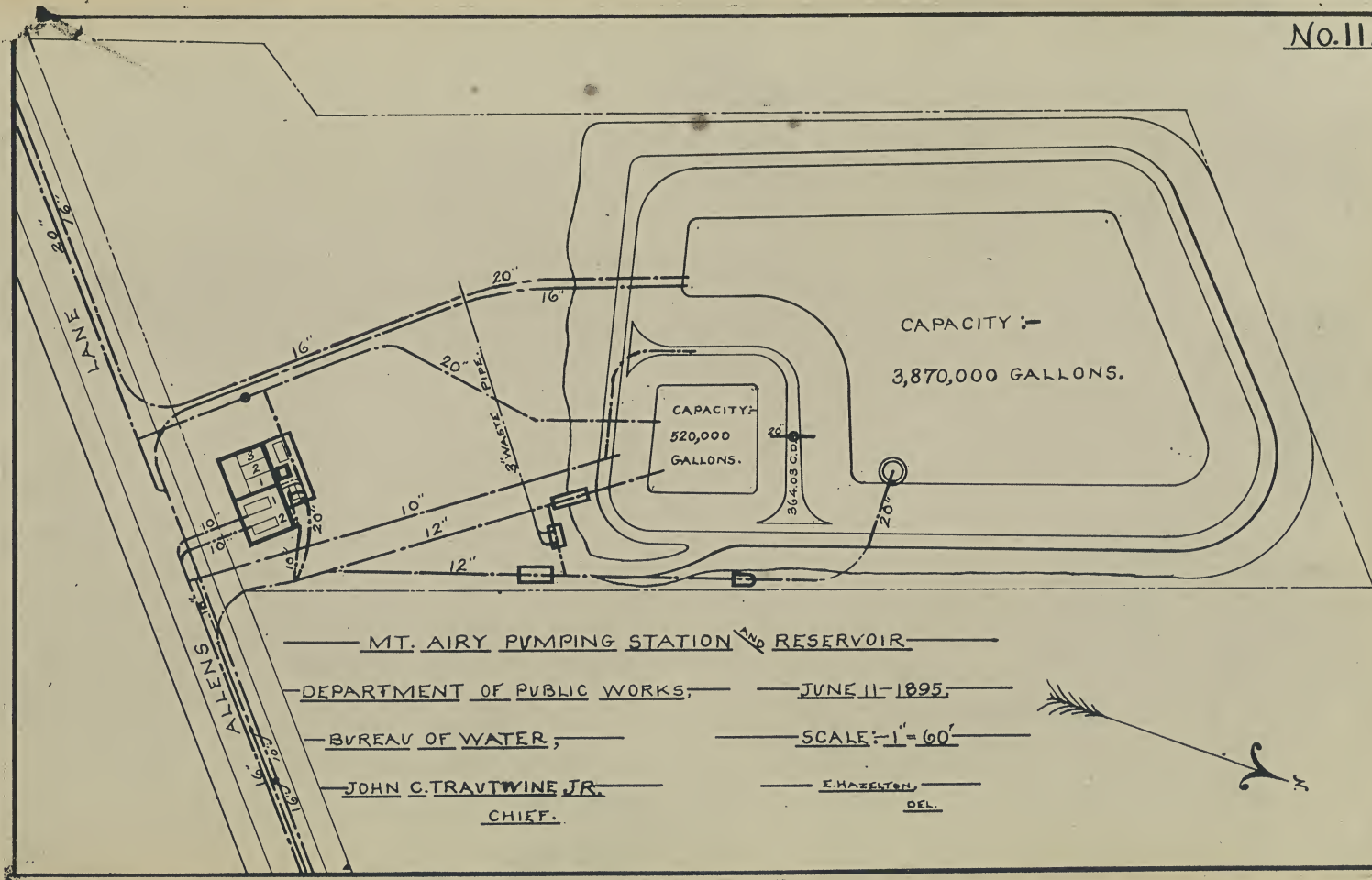
TWENTY-FOURTH

READING RAILROAD CHESTNUT HILL BRANCH

MARTIN MURPHY

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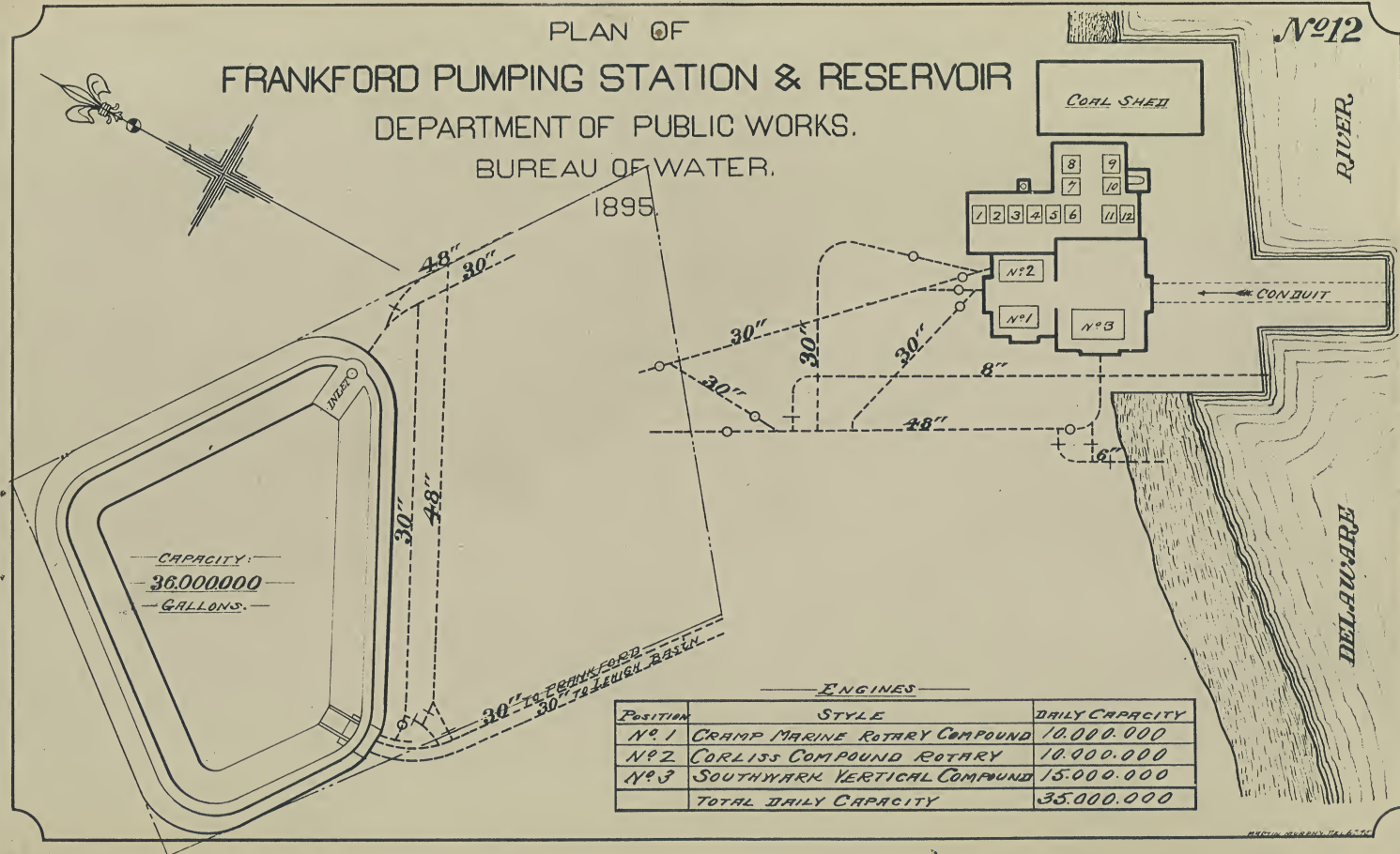




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PLAN OF  
FRANKFORD PUMPING STATION & RESERVOIR  
DEPARTMENT OF PUBLIC WORKS.  
BUREAU OF WATER.

1895.



CAPACITY:  
**36,000,000**  
GALLONS.

ENGINES		
POSITION	STYLE	DAILY CAPACITY
N° 1	CRAMP MARINE ROTARY COMPOUND	10,000,000
N° 2	CORLISS COMPOUND ROTARY	10,000,000
N° 3	SOUTHWARK VERTICAL COMPOUND	15,000,000
TOTAL DAILY CAPACITY		35,000,000

RECEIVED SEPTEMBER 1895

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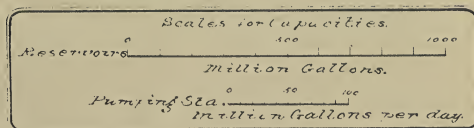


Upper Roxborough Res.  
127 Mln. Gals.

Lower Roxborough Res.  
13 Mln. Gals.

Queen Lane Res.  
383 Mln. Gals.

Water Supply System  
— of —  
Philadelphia  
Positions & Capacities of Pumping Stations & Reservoirs  
— and —  
Elevation of River Surfaces.  
— 1898. —



Wentz Furnace.  
36 Mln. Gals.

Belmont Res. (W.R.)  
40 Mln. Gals.

East Park Res.  
684 Mln. Gals.

Fairmount Res.  
26 Mln. Gals.

Corinthian Res.  
3 Mln. Gals.

Roxborough.  
25 Mln. Gals.

Flat Rock Dam

30 Feet

20

10

0 C.D.

Queen Lane.  
80 Mln. Gals.

Belmont (W.P.)  
38 Mln. Gals.

Spring Garden  
170 Mln. Gals.

Fairmount.  
33 Mln. Gals.

Lardner's Point.  
42 Mln. Gals.

Miles.

Miles

Schuylkill River

Delaware River

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